



FILE COPY

02-8703-48-PA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

COMPLETED

US Vanadium Site Name	NYD980535413 EPA Site ID Number
3801 Highland Avenue Niagara Falls, New York Address	02-8703-48 TDD Number

Date of Site Visit: 3/23/87

SITE DESCRIPTION

The US Vanadium site is an active dump 62 acres in size, located on Witmer Road, Niagara Falls, New York. The site is relatively flat with an intermittent stream running along its east and south boundaries. The Niagara River is located 6000 feet west. Land use in the area includes industrial, residential, and commercial in even proportions. The site was first used from 1920 to 1964 by the US Vanadium Corporation for the disposal of slag and refuse. In 1964 Airco Alloys began using the site. The wastes disposed of by Airco Alloys include ferrochrome silicon and ferrosilicon dusts. The site is currently co-owned by the SKW Alloys Inc. and Airco Properties, Inc. Part 360 permits were issued and both firms now operate landfills within the 62 acre dump for their own use. SKW Alloys Inc. disposes of slurried ferrosilicon and ferrochrome silicon dusts on their facility. Airco Properties Inc. disposes of brick, concrete, coke and collector dusts. Sampling of surface water and monitoring wells is performed quarterly by a mutual consultant, Secure Landfill Contractors. According to a Niagara County Health Department Report, an increase in chromium was observed in surface water samples.

PRIORITY FOR FURTHER ACTION: High Medium X Low None

RECOMMENDATIONS

Further investigation of the site is recommended to better characterize its potential hazards. Although the site is continuously monitored as provided in operating permits, the presence of chromium warrants further sampling.

Prepared by: Pauline Doherty
of NUS Corporation

Date: 6/9/87

362541



II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) 02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
US Vanadium 3801 Highland Avenue
03 CITY 04 STATE 05 ZIP CODE 06 COUNTY 07 COUNTY 08 CONG DIST.
Niagara Falls NY 14305 Niagara 063 32
09 COORDINATES
LATITUDE LONGITUDE
4 30 0 7' 0 5". N 0 7 90 0 2' 4 4". W

10 DIRECTIONS TO SITE (Starting from nearest public road)

From 190 North take Route 31 (Witmer Road) West. The site is located on Witmer Road, 1500 feet northeast of the intersection of Hyde Park Boulevard.

III. RESPONSIBLE PARTIES

01 OWNER (if known) 02 STREET (Business, mailing, residential)
SKW Alloys, Inc. 3801 Highland Avenue
03 CITY 04 STATE 05 ZIP CODE 06 TELEPHONE NUMBER
Niagara Falls NY 14305 (716) 285-1252
07 OPERATOR (if known and different from owner) 08 STREET (Business, mailing, residential)
Airco Properties, Inc. 4861 Packard Road
09 CITY 10 STATE 11 ZIP CODE 12 TELEPHONE NUMBER
Niagara Falls NY 14302 (716) 285-9381

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☒ F. OTHER: Co-ownership (Specify) ☐ G. UNKNOWN

14. OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: / / ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: / /
☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION BY (Check all that apply)
☒ YES DATE: Unknown ☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☒ D. OTHER CONTRACTOR
☒ NO ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: (Specify)
CONTRACTOR NAME(S): Secure Landfill Contractors

02 SITE STATUS (Check one) 03 YEARS OF OPERATION
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN 1920 / Present UNKNOWN
BEGINNING ENDING

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The wastes present are inorganic compounds, primarily slags and collector dusts. Chromium is the contaminant of concern and its concentration is unknown.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Chromium is the contaminant of concern and its concentration is unknown. The toxic effects of chromium compounds have been well demonstrated. Chromium is a heavy metal that generally exists in either a trivalent or hexavalent oxidation state. The more toxic, hexavalent chromium is soluble and rather mobile in groundwater and surface water. Hexavalent chromium is an animal carcinogen and causes kidney damage in animals and humans. Trivalent chromium is less toxic and causes contact dermatitis. Chromium is accumulated in a variety of aquatic and marine biota and passage through the food chain can be demonstrated.

IV. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) (Inspection on time available basis) ☐ C. LOW ☐ D. NONE

(No further action needed. complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT 02 OF (Agency/Organization) 03 TELEPHONE NUMBER
Diana Messina U.S. EPA (201) 321-6776
04 PERSON RESPONSIBLE FOR ASSESSMENT 05 AGENCY 06 ORGANIZATION 07 TELEPHONE NUMBER 08 DATE
P. Doherty NUS Corp. (201) 225-6160 6 / 9 / 87

PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

01 STATE 02 SITE NUMBER
NY 0980535413

II. WASTE STATES, QUANTITIES AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)		02 WASTE QUANTITY AT SITE	03 WASTE CHARACTERISTICS (Check all that apply)		
<input checked="" type="checkbox"/> A. SOLID	<input checked="" type="checkbox"/> E. SLURRY	(Measures of waste quantities must be independent) Approx. TONS <u>643,000</u> CUBIC YARDS _____ NO. OF DRUMS _____	<input checked="" type="checkbox"/> A. TOXIC	<input type="checkbox"/> E. SOLUBLE	<input type="checkbox"/> I. HIGHLY VOLATILE
<input checked="" type="checkbox"/> B. POWDER, FINES	<input type="checkbox"/> F. LIQUID		<input type="checkbox"/> B. CORROSIVE	<input type="checkbox"/> F. INFECTIOUS	<input type="checkbox"/> J. EXPLOSIVE
<input type="checkbox"/> C. SLUDGE	<input type="checkbox"/> G. GAS		<input type="checkbox"/> C. RADIOACTIVE	<input type="checkbox"/> G. FLAMMABLE	<input type="checkbox"/> K. REACTIVE
<input type="checkbox"/> D. OTHER: _____ (Specify)			<input checked="" type="checkbox"/> D. PERSISTENT	<input type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> L. INCOMPATIBLE
			<input type="checkbox"/> M. NOT APPLICABLE		

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS	643,000	tons	
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
IOC	Ferrochrome Silicon Slag		Landfill	Unknown	
IOC	Ferromanganese Slag	12604534	Landfill	Unknown	
IOC	Ferrosilicon Dust	8049170	Landfill	Unknown	
IOC	Ferrochrome Silicon Dust		Landfill	Unknown	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (See specific references. e.g., state files, sample analysis, reports)

Waste Disposal Site Survey, Niagara County, N.Y. U.S. EPA, 1980
 Niagara County Waste Sites, Niagara County Health Department, Hopkins, 1983
 Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites, Clements Associates, Inc., 1985

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3.8 04 NARRATIVE DESCRIPTION

There is potential for groundwater contamination. The site overlies two aquifers. The upper one is an unconfined system within unconsolidated deposits of clay, stratified drift and till. There is a residential well 3500 feet north of the site which taps into this aquifer.

01 ☒ B. SURFACE WATER CONTAMINATION 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 04 NARRATIVE DESCRIPTION

An intermittent stream passes through the site. The Niagara River is the nearest permanent body of surface water, 6000 ft. west. There are no water intakes within three miles downstream on the Niagara River.

01 ☒ C. CONTAMINATION OF AIR 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 60,200 04 NARRATIVE DESCRIPTION

There is a potential for the contamination of air. Chromium-contaminated dust could be generated from the landfill.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No potential fire or explosive conditions exist due to the nature of the wastes.

01 ☒ E. DIRECT CONTACT 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2000 04 NARRATIVE DESCRIPTION

The potential for direct contact exists due to unknown accessibility.

01 ☒ F. CONTAMINATION OF SOIL 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 62 04 NARRATIVE DESCRIPTION
(ACRES)

The potential for contamination of soil exists. Compounds that were disposed of in the landfill may leach into the soil.

01 ☒ G. DRINKING WATER CONTAMINATION 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 04 NARRATIVE DESCRIPTION

There is no potential for drinking water contamination. The town of Niagara Falls is supplied by a public system which has an intake along the Niagara River. The intake is upstream from the site.

01 ☒ H. WORKER EXPOSURE/INJURY 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: Unknown 04 NARRATIVE DESCRIPTION

Workers may be potentially affected by contaminated soil, water or air. The site currently receives industrial wastes from SKW and Airco.

01 ☒ I. POPULATION EXPOSURE/INJURY 02 OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 60,200 04 NARRATIVE DESCRIPTION

Greater than 60,200 people could be exposed to potential contaminants. Contaminated air can possibly affect 60,200 people. Approximately 2000 people live within a mile of this site and may come into direct contact. An unknown number of employees of SKW Alloys Inc. and Airco Properties, Inc. may also be affected by contaminants.

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is a potential for damage to flora. Contaminated groundwater may affect vegetation along the Niagara River. Contaminated surface water may affect plants near the intermittent stream.

01 X K. DAMAGE TO FAUNA

04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

Potential damage to fauna exists through the contamination of surface water and groundwater. Aquatic organisms in the stream may be affected by contaminated surface water. Those in the Niagara River may be affected by contaminants in the groundwater which makes its way to the river.

01 X L. CONTAMINATION OF FOOD CHAIN

04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

The potential exists for the contamination of the food chain from the ingestion of chromium contaminated lower plant and aquatic species in the stream or the Niagara River.

01 M. UNSTABLE CONTAINMENT OF WASTES
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: 2000

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

04 NARRATIVE DESCRIPTION

The population can potentially be affected due to the unknown means of waste containment.

01 X N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

The potential for damage to offsite property exists through surface runoff and/or contamination of the intermittent stream.

01 X O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

There is potential for the contamination of sewers through surface runoff. Storm drains were observed on Hyde Park Boulevard during the off-site reconnaissance.

01 X P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

Both Airco Properties Inc. and SKW Alloys Inc. operate landfills within the 62 acre area with permits. There is a potential for illegal dumping due to unknown accessibility.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 60,200

IV. COMMENTS

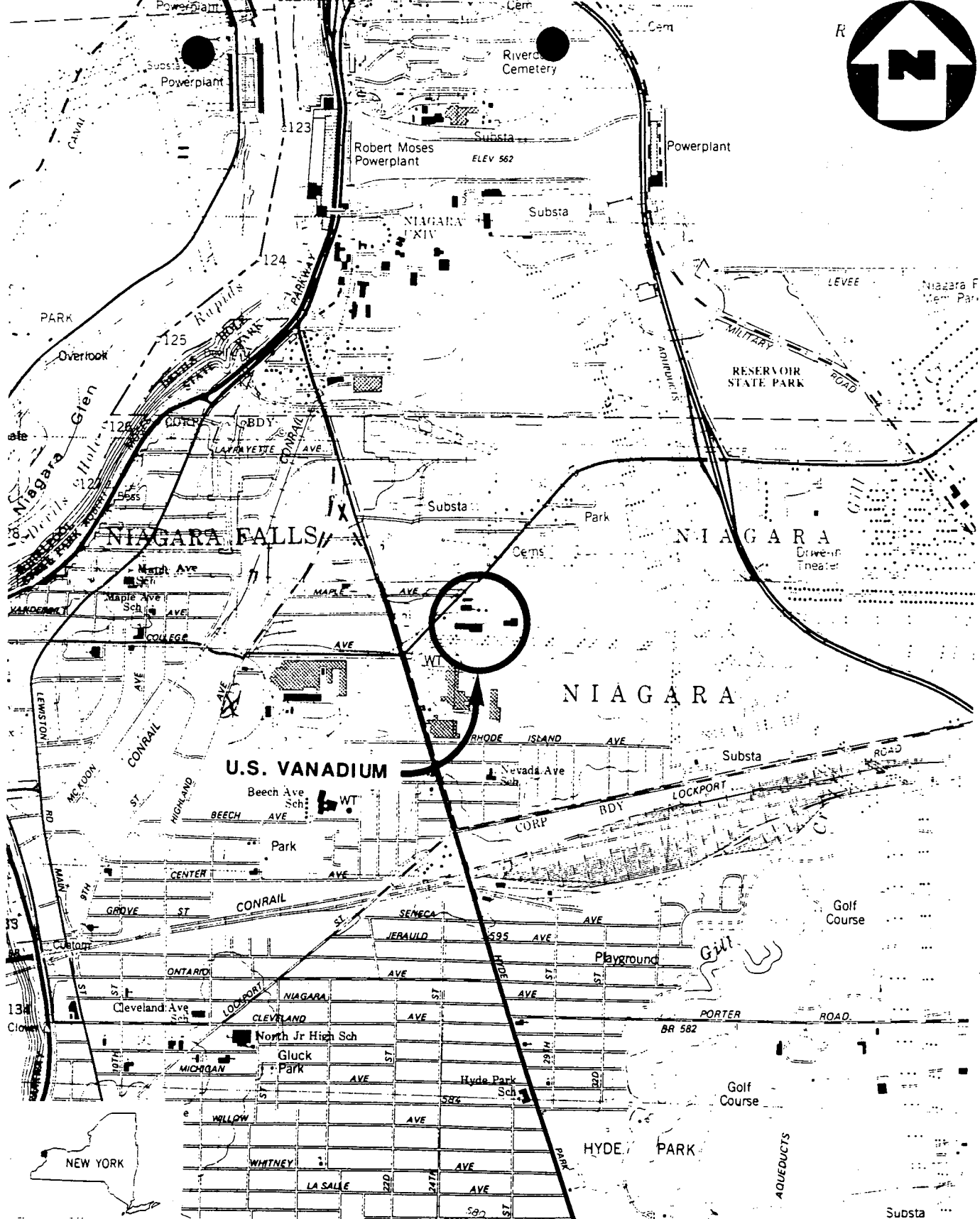
There are no photographs available. Pictures taken during the off-site reconnaissance were not of the site.

V. SOURCES OF INFORMATION (Cite specific references. e.g., state files, sample analysis, reports)

Niagara County Waste Sites, Niagara County Health Department, Hopkins, 1983
U.S. Department of Commerce, Bureau of the Census, 1980
Waste Disposal Site Survey, Niagara County, New York, U.S. EPA, 1980
USGS Topographical Maps, Niagara and Lewiston Quads, 1980
Telecon between P. Dicky, Niagara County Health Department and P. Doherty, NUS.
Off Site Reconnaissance Information Reporting Form, D. deBruijn and M. Bauman, 3/23/87.

APPENDIX A

MAPS



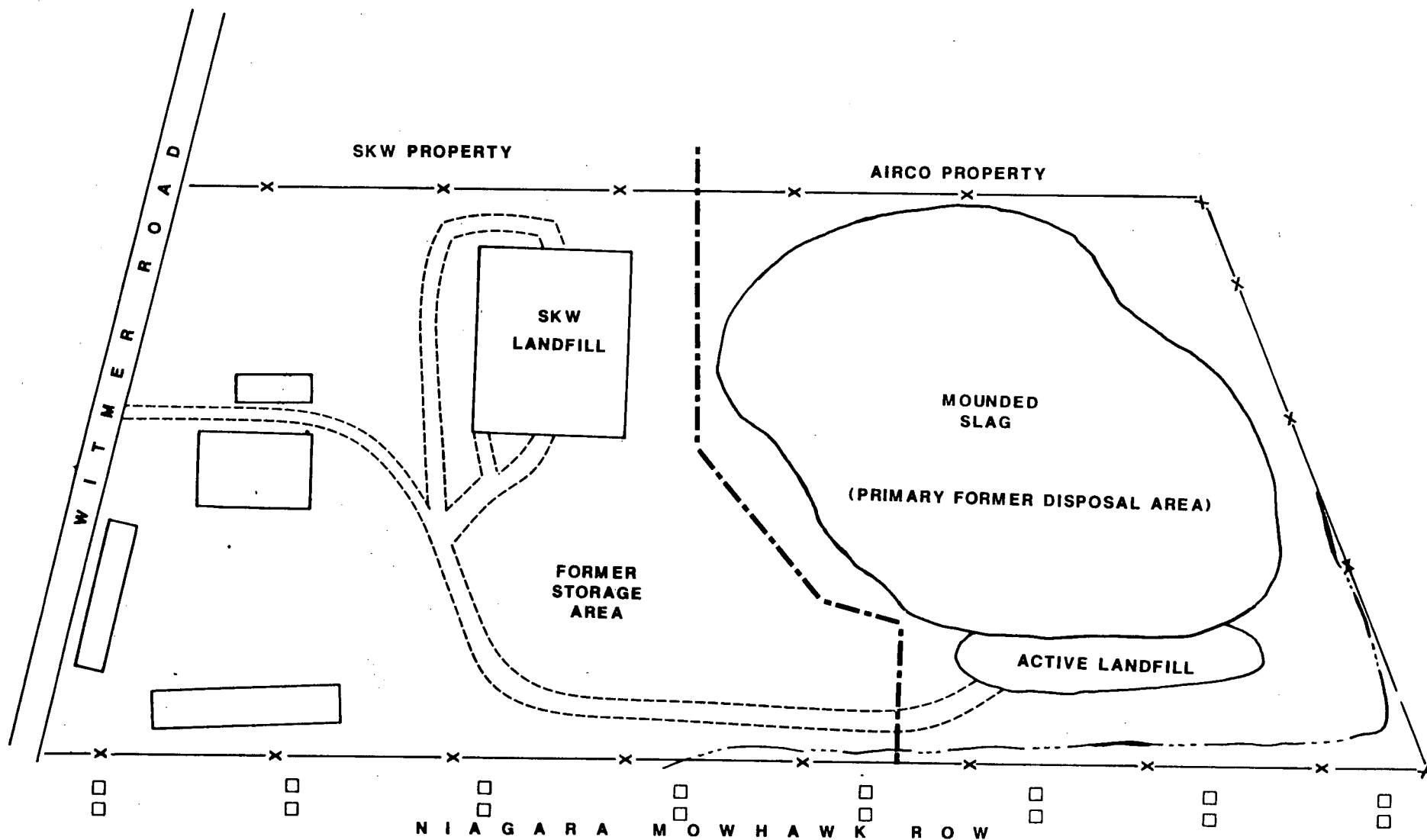
(QUAD) NIAGARA & LEWISTON

SITE LOCATION MAP
U.S. VANADIUM, NIAGARA FALLS, N.Y.

SCALE: 1" = 2000'



FIGURE 1



SITE MAP
U.S. VANADIUM, NIAGARA FALLS, N.Y.
 (NOT TO SCALE)

FIGURE 2



APPENDIX B
BACKGROUND INFORMATION

NIAGARA COUNTY
HAZARDOUS WASTE SITES

NIAGARA COUNTY HEALTH DEPARTMENT
INVOLVEMENT AND CONCERNS

...CONFIDENTIAL...

Prepared By: Michael Hopkins
Nov.-Dec. 1983

NAME:

Airco Alloys (DEC #932001)

LOCATION:

The former and active disposal areas are located on a 62-acre area southeast of Witmer Road, 1500 feet northeast of the intersection of Hyde Park Boulevard in the Town of Niagara.

A sketch is attached.

OWNERSHIP:

This area is currently owned by SKW Alloys, Inc. (37 acres), 3801 Highland Avenue, Niagara Falls, NY 14305 and by Airco Properties, Inc. (25 acres), 4861 Packard Road, Niagara Falls, NY 14302. Past owners include Airco Alloys, Inc. and the Vanadium Corporation of America.

The contact person for the Airco property is Ronald Spears of Airco Speer Carbon Graphite (285-9381) and for SKW, the contact is William Favero (285-1252).

HISTORY:

The site was first used from 1920 to 1964 by the Vanadium Corporation for disposal of slag and refuse. The volume of slag disposed of is estimated as 594,000 tons by the IATF and as 350,000 tons in the Application for a Solid Waste Management Facility for Airco Properties, Inc. The IATF also reports that 88,000 tons of refuse were disposed of. The majority of this waste was disposed of on the property now owned by Airco. A portion of the slag may have been removed after disposal for use as fill.

Airco Alloys began using the Witmer Road site in 1964 for wastes essentially the same as those of Vanadium. In 1971, baghouse collectors were installed at the Airco Plant and the dusts collected were disposed of at this site. Waste volumes disposed of by Airco Alloys included 6000 tons of ferrochrome silicon and 43,000 tons of ferrosilicon dusts (slurried). Again, most of this disposal occurred on the present Airco property although storage of various materials such as coke, ores and raw materials occurred on the present SKW property. Some of this material was never removed.

Part 360 permits to operate disposal facilities were issued to Airco Speer and SKW during the 1980's. Both firms now operate landfills for their own use. SKW disposes of slurried ferrosilicon and ferrochrome silicon baghouse dusts in two cells occupying about 5 acres total. Airco-Speer disposes of "hard" wastes such as brick, concrete, coke, etc., and collector dust and carbon fines in their facility. Airco's permit calls for closure of about 20 acres upon completion of disposal activities. This will close the majority of the former disposal area as well.

Monitoring of eight on-site wells and of surface water on-site is performed quarterly by a mutual consultant of Airco and SKW. The results are sent to DEC-Region 9 (Robert Mitrey).

Recent inspections (Winter 1983) of both the Airco and SKW properties have confirmed much of the above information. Both active facilities were found to be essentially in compliance with codes and permit conditions.

PREVIOUS SAMPLE RESULTS:

Groundwater and surface water samples have been taken prior to issuance of 360 permits and quarterly thereafter. Analytic parameters include pH, conductivity, COD, TOC, Barium, Chromium, Iron, Manganese, Silicon and Zinc. The results of 1979 and 1980 sampling are given in Application for Solid Waste Management Facility for the Airco Properties, Inc. (1980) and Support Document for Application to Construct and Operate a Solid Waste Management Facility for SKW Alloys, Inc. (1980). Subsequent analytical reports have been sent to DEC-Buffalo.

In general, the results show minimal or no contamination of groundwater but they do show increase in total chromium occurring across the site in the surface water samples. Chromium concentrations in surface water leaving the site ranged from 0.35 to 2.2 mg/l in 1980 and were higher than background concentrations by two to three times. It was noted that conductivity decreases across the site, apparently due to dilution.

EXAMINATION OF AERIAL PHOTOS:

Examination of aerial photographs provided no new information but confirmed that disposal occurred primarily on the present Airco property. USDA (1958 and 1966) and SKW Alloys (1980) photos were used.

SOILS/GEOLOGY:

Soils at this site were studied by Earth Dimensions, Inc. prior to the design of the active landfill facilities. Details and boring logs are available in the document accompanying SKW's and Airco's applications.

Essentially, soils are characterized as consisting of 1 to 9 feet of miscellaneous fill material (waste in some cases), over 2 to 12 feet of clay, over 0 to 7 feet of water sorted stratified sediments, over 1 to 7 feet of Glacial Till. Refusal occurred at depths of 11 to 24 feet. The fill thickness is the dominate factor affecting depth to bedrock.

Bedrock is Lockport Dolomite. Bedrock reportedly dips to the south at a slope of 1/2%. The Lockport Formation may contain several water bearing zones at various depths.

GROUNDWATER:

The Support Document accompanying SKW's 360 permit application indicates that two aquifers are present beneath the site. The first is an artesian aquifer in the Lockport Formation. The second is an unconfined aquifer in the unconsolidated material. The direction of flow of the unconfined aquifer is to the southwest. The direction of flow of the bedrock aquifer has not been determined.

The nearest known drinking water well is 3500 feet north. The locations of other wells are unknown. There are no industrial users of groundwater in this area.

752001
SURFACE WATER:

An intermittent stream passes through the site. This stream may be dry during the late spring and summer. The nearest permanent body of surface water is the Niagara River, 6000 feet west. There are no water intakes within three miles downstream on the Niagara River.

The site is not in a 100 year flood plain and is not within one mile of a designated wetland.

AIR:

The only potentially significant air emission problem associated with this site is dust. No volatile or organic wastes are known to be present.

Approximately 2000 people live within one mile of this site. The nearest population is 2000 feet southwest.

Land use within two miles includes industrial, residential and commercial in roughly even proportions.

FIRE/EXPLOSION:

Due to the nature of the wastes present, there appears to be no potential for fire at this site.

DIRECT CONTACT:

Access is restricted to the public. The wastes present should not present significant health problems if contacted.

CONCLUSIONS:

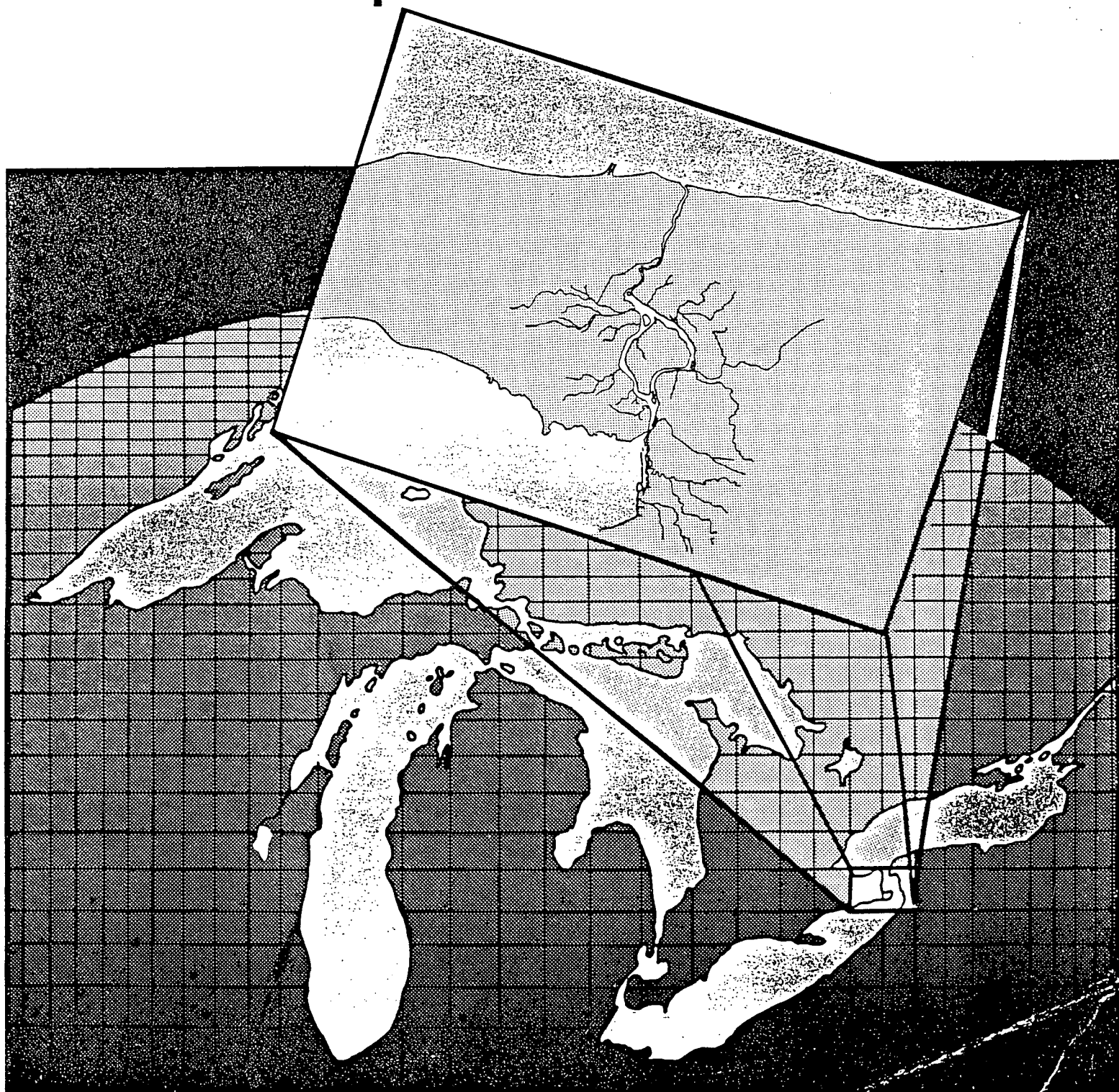
This site has been used for disposal for over 60 years and is still active. The wastes present are primarily inorganic and largely consist of slag and collector dusts. The concentration of chromium in the wastes is not known. Chromium is apparently the primary contaminant of concern. The active facilities are permitted and are essentially in compliance with Part 360.

RECOMMENDATIONS:

Continued monitoring and closure of active facilities as provided by the operating permits should be adequate to prevent significant impacts from this site. No additional action beyond that specified in the operating permits is considered necessary.



Preliminary Evaluation Of Chemical Migration To Groundwater and The Niagara River from Selected Waste- Disposal Sites



General information and chemical-migration potential.--The Airco Alloys site, in the city of Niagara Falls, was used for the disposal of graphite plant waste and slurried flue dusts. The site is monitored quarterly, and no significant contamination has been indicated. The waste materials were deemed nonhazardous by the New York State Department of Environmental Conservation.

Overland runoff creates a large potential for surface migration from the site.

Geologic information.--The site consists of unconsolidated deposits of clay, stratified drift, and till overlying bedrock of Lockport Dolomite. Depth to bedrock ranges from 11 to 24 ft.

Hydrologic information.--The site overlies two aquifers. The lower one is the confined aquifer of the Lockport Formation, in which water-bearing zones are generally limited to fractures in the upper zones of the Formation; the upper one is an unconfined system within the unconsolidated deposits. The direction of flow is probably southwestward.

Chemical information.--The site owner collected ground-water and surface-water samples in 1979 and 1980 for chemical analysis. The ground-water samples indicated little or no contamination, but the surface-water samples indicated an elevated chromium concentration in water leaving the site. The owners plan continued monitoring.

2. AIRCO SPEER CARBON-GRAPHITE (USGS field reconnaissance)

NYSDEC 932002

General information and chemical-migration potential.--The Airco Speer Carbon-Graphite site, in the city of Wheatfield, was used during 1930-45 for the disposal of 28,800 to 144,000 yd³ of furnace insulation, refractories, and sand as well as 2,500 gal/min of linseed oil and 7 tons of asbestos fiber and tape. Most of the area is paved to facilitate control and cleanup of process dust.

The overburden at several points on the site is only 4 to 6 ft deep, and the chemical analyses indicated high concentrations of organic priority pollutants. The potential for contaminant migration is indeterminable.

Geologic information.--The site was built on a filled area of unknown composition overlying a lacustrine silty clay. Beneath the clay is Lockport Dolomite. The U.S. Geological Survey drilled four test boring on the site in 1982; locations are shown in figure C-1. The geologic logs are on page 291.

Hydrologic information.--Ground water appears to be contained in the fractures within the bedrock and was not encountered during the 1982 drilling.

CONTROL NO:

DATE:

5/20/87.

TIME:

3:30 PM.

DISTRIBUTION:

U.S. Vanadium 02-8703-48.
Titanium Pigment Co., Inc.
02-8703-57.

BETWEEN:

Mike Hopkins

OF: Niagara County
Health Department

PHONE: 716

(267) 284-3128
P.O.

AND:

C. J. Ooherty

DISCUSSION:

Drinking H₂O

(NUS)

1. There ~~were~~ ^{are} ^{P.O.} five residential wells on Pennsylvania Ave, four of which were used for drinking water. These homes are now in the process of converting to public supply.

2. The town of Niagara Falls is supplied by a public system that has its intake on the Niagara River, in Wheatfield near Williams Pond. ^{up} upstream.

3. There ~~are~~ ^{is} not a liner nor a cover on the site.

4. Mr. Hopkins stated that "contaminants"

ACTION ITEMS:

from Tam Ceramics are relatively inert and non-hazardous. The site is located near Hyde Park Sanitarium ~~etc.~~ ^{and} in comparison relatively insignificant.

CONTROL NO:

DATE:

5/22/87

TIME:

10:50 am.

DISTRIBUTION:

U.S. Vanadium - 02-8703-48.

NYQ4PA

BETWEEN:

M. Hopkins

OF: Maguira County
Health Dept.

PHONE:

(716) 284-3128

AND:

G. Osherty

(NUS)

DISCUSSION:

Site Location

Mr. Hopkins stated that:

(1) Vanadium Corporation operated plants on both Highland Ave and Witmer Rd.

(2) The only significant dumping site is ~~the P.O. one~~ on Witmer Road - as outlined in New Co. Hazardous Waste Sites, Hopkins 1983 DEC #932001.

(3) As far as he knows there is no problem with the Highland Ave property.

ACTION ITEMS:

* G. Osherty is currently researching the site.

CONTROL NO:

02-8703-48-PA

DATE:

June 15, 1987

TIME:

10:30am

DISTRIBUTION:

MS Vanadium

02-8703-48

/ NYQ4PA.

BETWEEN:

Gaul Dicky

OF:

Niagara Co.
Health Department

PHONE:

(716) 284-3128

AND:

G. Wokuty

(NUS)

DISCUSSION:

Mr. Dicky stated that Part 360 Permits are issued by the state. The monitoring of the landfills (SKW and Aico Properties) is conducted by Secure Landfill Contractors.

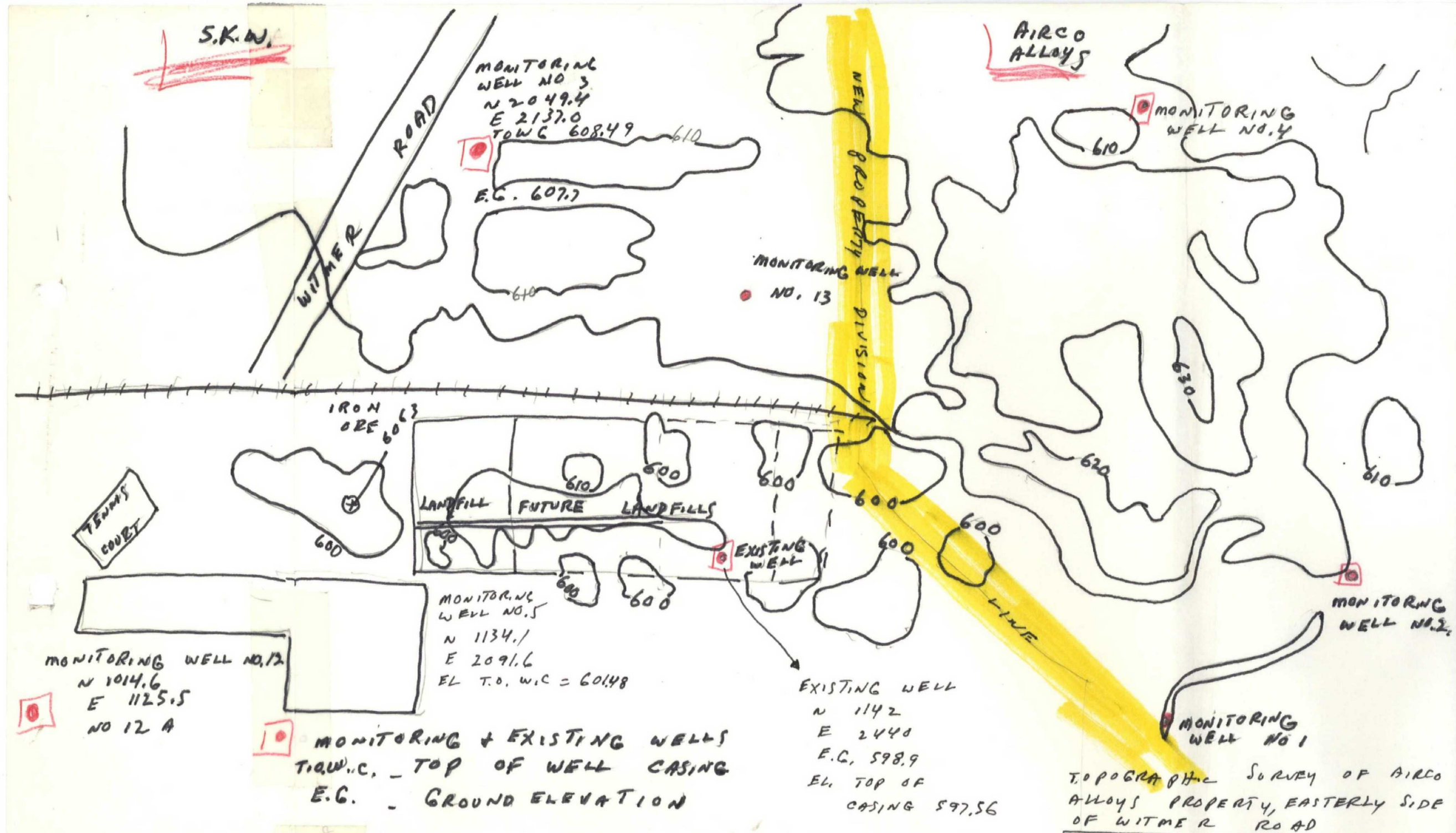
Residential well (mentioned in the Niagara Co. Health Dept - (Concern...)) taps into the overburden. Residential wells in the general area are being replaced with public water supplies. However transition is not complete.

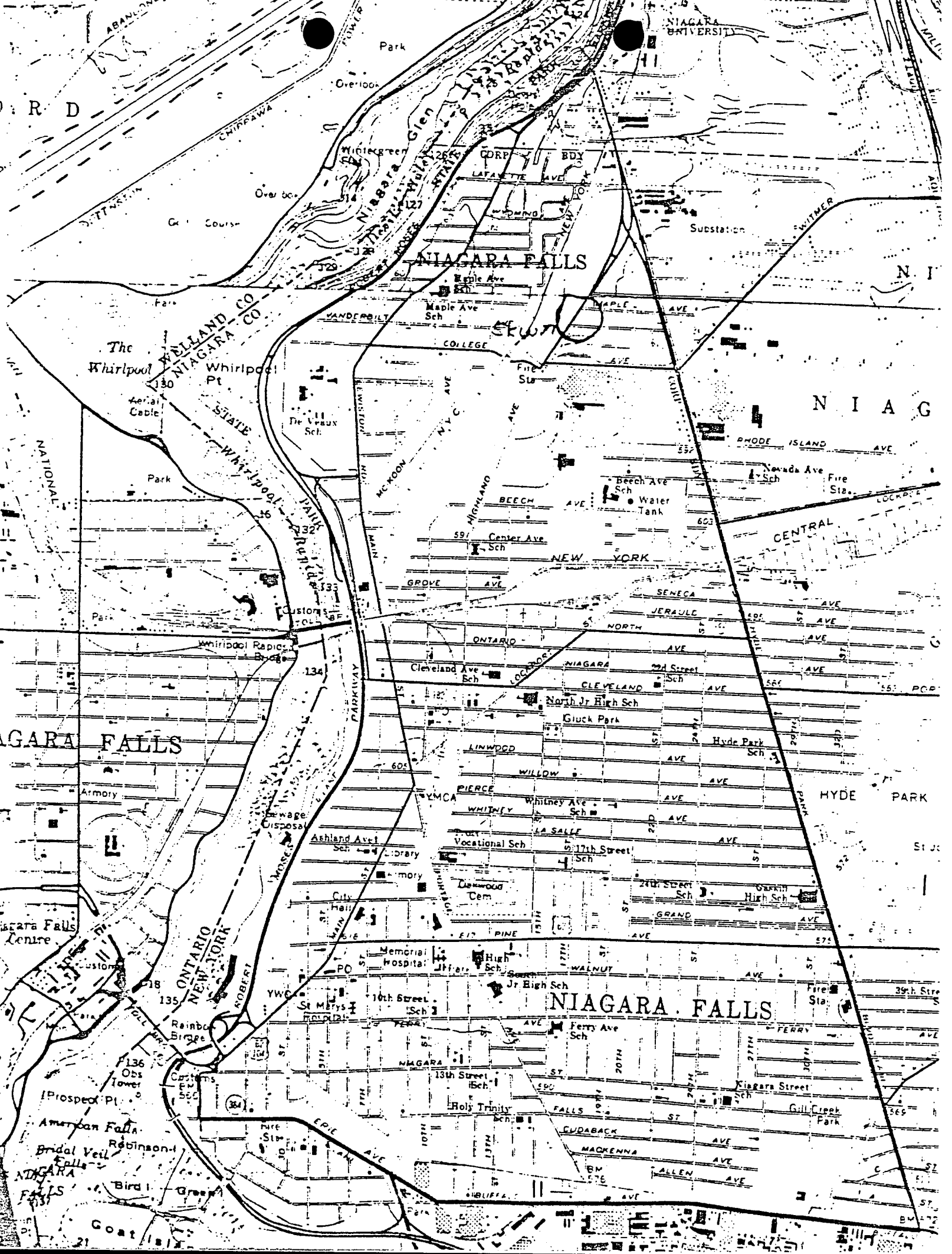
The site is not accessible - There is a fence around the site - However does not ~~clearly~~ ^{completely} mark the

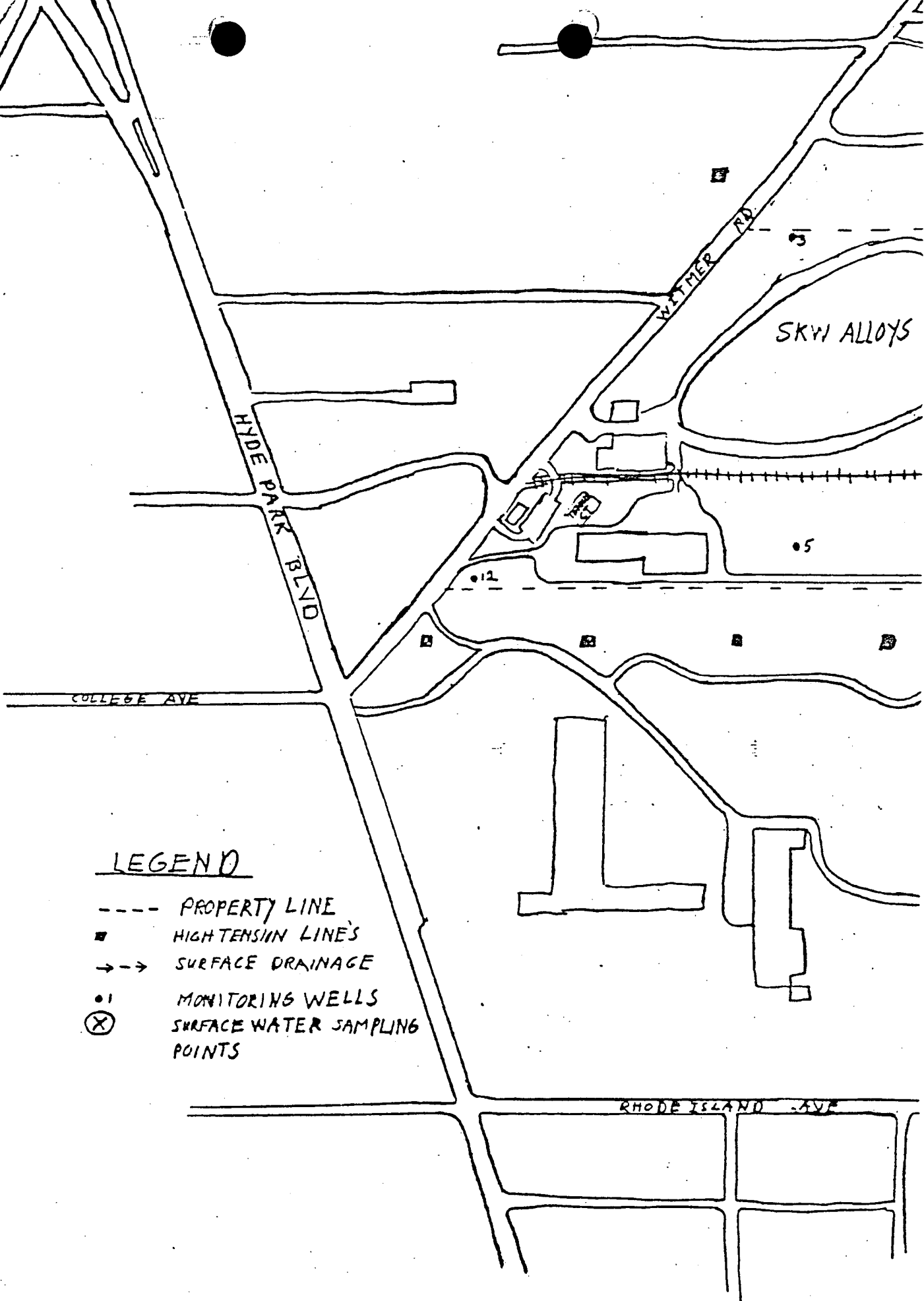
ACTION ITEMS:

boundaries - (They) may dump outside the fence.

SKW and Aico.

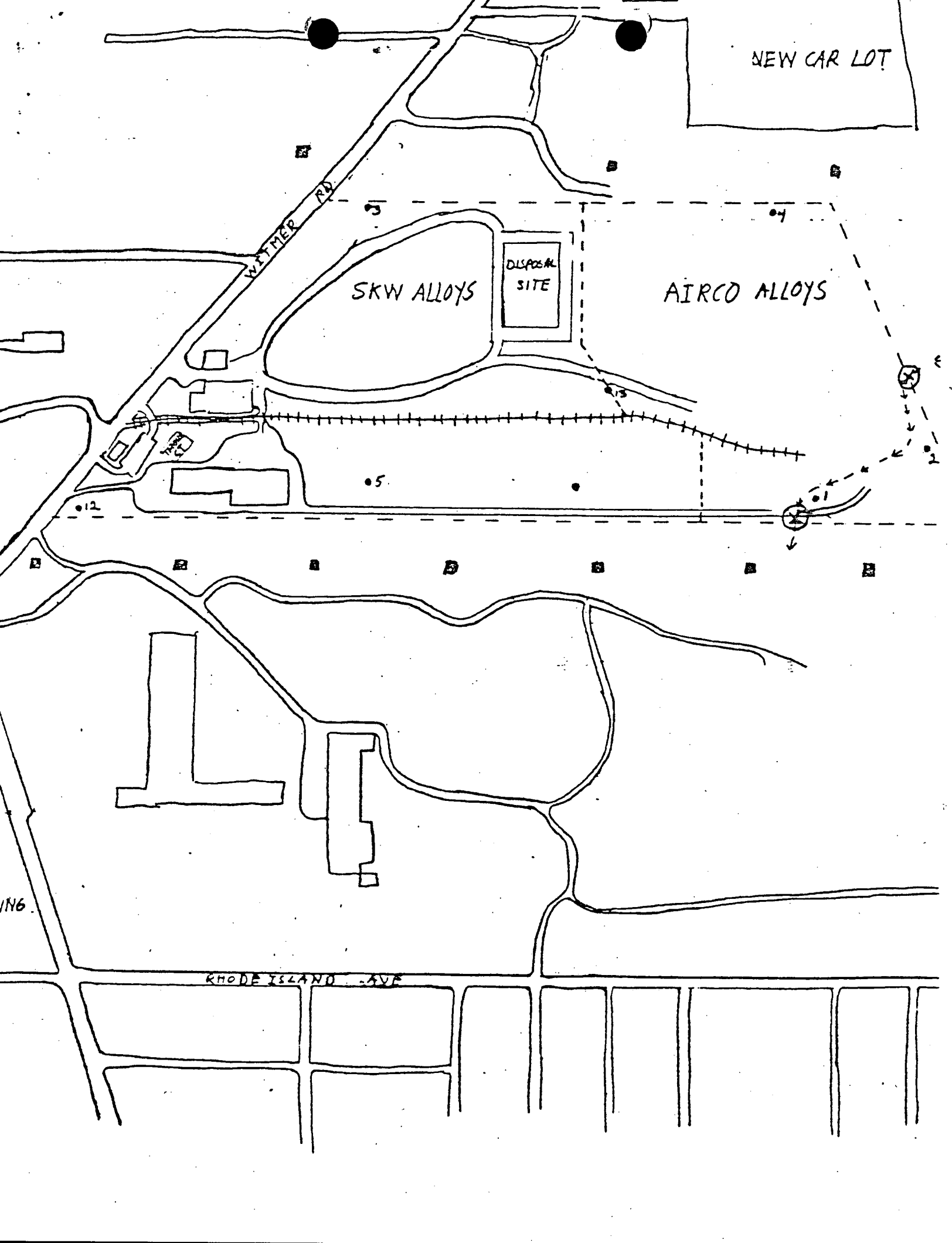


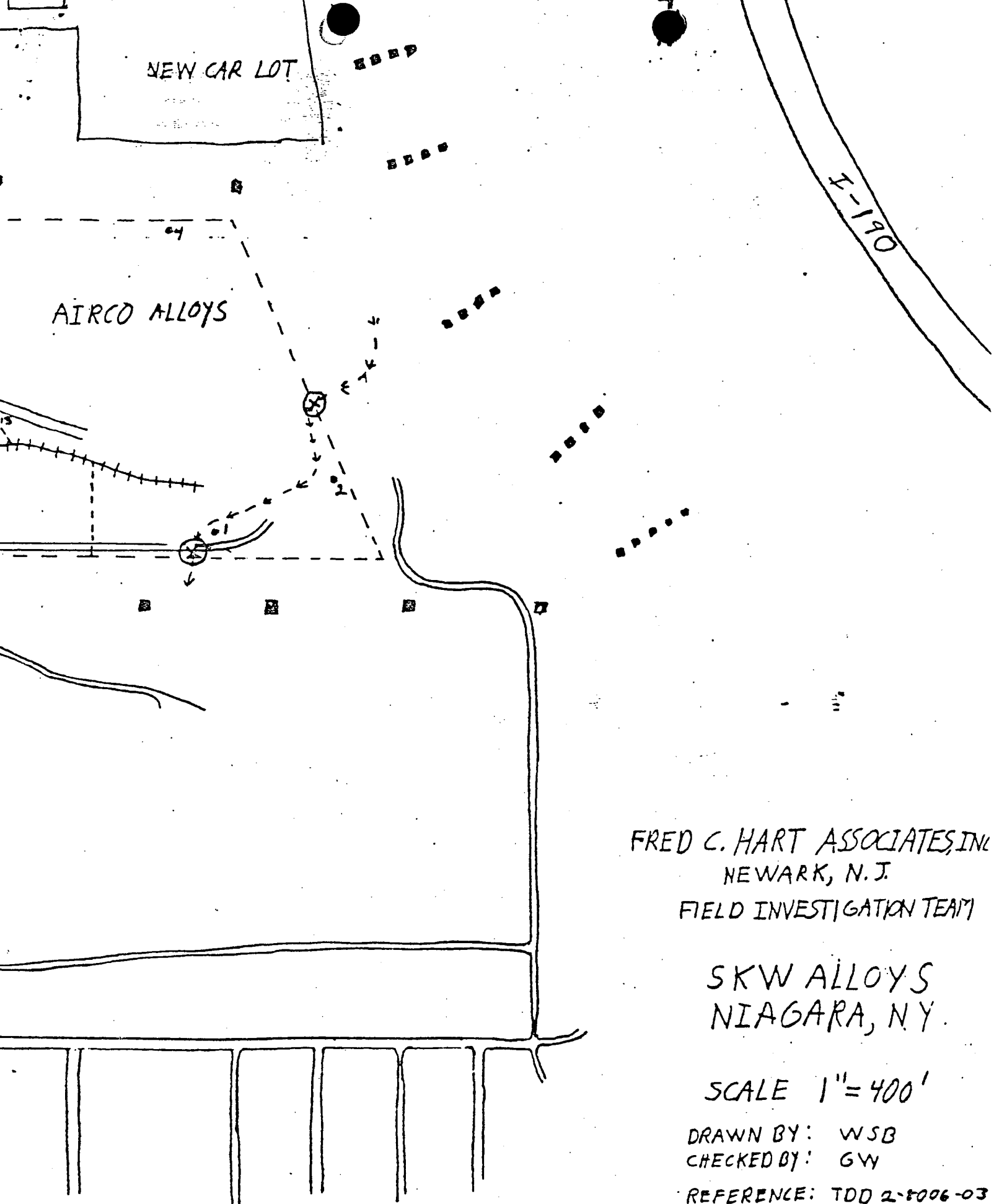




LEGEND

- PROPERTY LINE
- HIGH TENSION LINES
- SURFACE DRAINAGE
- 1 MONITORING WELLS
- (X) SURFACE WATER SAMPLING POINTS





FRED C. HART ASSOCIATES, INC.
NEWARK, N.J.
FIELD INVESTIGATION TEAM

SKW ALLOYS
NIAGARA, N.Y.

SCALE 1" = 400'

DRAWN BY: WSB

CHECKED BY: GW

REFERENCE: TOD 2-8006-03